

**FINGER METAL-INSULATOR-METAL CAPACITOR  
DEVICE WITH LOCAL INTERCONNECT**

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**RELATED APPLICATION DATA**

[0001] This application is a division of U.S. Patent Application No.  
10/077,450 entitled "Finger Metal-Insulator-Metal Capacitor with Local  
10 Interconnect," filed 15 February 2002. *ABN*

**BACKGROUND OF THE INVENTION**

[0002] One essential component of integrated circuits is a capacitor. Design  
and production of capacitors trades off capacity and footprint (together determining  
15 density) with manufacturing processes. There will always be an opportunity to  
introduce a better capacitor design and manufacturing process.

**SUMMARY OF THE INVENTION**

[0003] The present invention includes methods to produce a finger metal-  
20 insulator-metal capacitor. One plate can either be a base conductive layer or  
overlying or an additional, deposited layer. Capacitor formation may be integrated  
with formation of interconnects for other components on the same die. The resulting  
capacitor has a novel geometry. Particular aspects of the present invention are  
described in the claims, specification and drawings.

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**BRIEF DESCRIPTION OF THE DRAWINGS**

[0004] FIG. 1 is a cross section of a die with some devices already formed  
and covered by an insulator.

[0005] FIG. 2 is a cross section of the same die, with contacts formed and a  
30 resist layer patterned.